IN THE CLAIMS

1. (currently amended) A telephone call and voice processing system comprising:

switching circuitry for receiving a call, wherein the switching circuitry connects the call to one of a plurality of telecommunications devices coupled to the system in accordance with information accompanying the call that identifies the telecommunications device, wherein two or more of the plurality of telecommunications devices each further comprises both a speaker and a microphone for enabling a user to audibly communicate with the call; and

voice processing circuitry for automatically interacting with the call to direct the call to a voice mailbox if a user of the telecommunications device does not answer the call, wherein the switching circuitry and the voice processing circuitry are controlled by not more than one microprocessor.

2. (previously presented) The system as recited in claim 1, wherein the voice processing circuitry further comprises a signal processing circuitry coupled to the one microprocessor.

3. (previously presented) A telephone call and voice processing system comprising:

switching circuitry for receiving a call, wherein the switching circuitry connects the call to a telecommunications device coupled to the system; and

voice processing circuitry for automatically interacting with the call, wherein the switching circuitry and the voice processing circuitry are controlled by a single processing means, wherein the voice processing circuitry further comprises a signal processing circuitry coupled to the single processing means, wherein the switching circuitry further comprises a digital cross-point matrix coupled to the single processing means and to the signal processing circuitry.

4. (cancelled)

5. (cancelled)

6. (previously presented) A telephone call and voice processing system comprising:

a plurality of telecommunications devices coupled to the system as extensions;

switching circuitry for receiving a call, wherein the switching circuitry connects the call to one of the telecommunications devices; and

voice processing circuitry for automatically interacting with the call, wherein the switching circuitry and the voice processing circuitry are controlled by a single processing means, wherein the single processing means is controlled by a single set of software operable for controlling both the switching circuitry and the voice processing circuitry.

7. (cancelled)

8. (cancelled)

9. (cancelled)

10. (cancelled)

11. (cancelled)

12. (currently amended) A telephone call and voice processing system comprising:

switching circuitry for receiving a call, wherein the switching circuitry connects the call to a telecommunications device coupled to the system, wherein two or more of the plurality of telecommunications devices each further comprises both a speaker and a microphone for enabling a user to audibly communicate with the call; and

voice processing circuitry for automatically interacting with the call to direct the call to a voice mailbox if the telecommunications device does not go off-hook to answer the call, wherein the switching circuitry and the voice processing circuitry are controlled by a single processing means, wherein the voice processing circuitry further comprises a signal processing circuitry coupled to the single processing means, wherein the signal processing circuitry further includes:

a DTMF receiver operable for recognizing DTMF tones from the call and instructing the switching circuitry to connect the call to the telecommunications device identified by the DTMF tones.

13. (cancelled)

14. (cancelled)

15. (cancelled)

16. (cancelled)

17. (cancelled)

18. (currently amended) A telephone call and voice processing system comprising:

switching circuitry for receiving a call, wherein the switching circuitry connects the call to one of a plurality of telecommunications devices coupled to the system in accordance with information accompanying the call that identifies the telecommunications device, wherein two or more of the plurality of telecommunications devices each further comprises both a speaker and a microphone for enabling a user to audibly communicate with the call;

voice processing circuitry for automatically interacting with the call, wherein the switching circuitry and the voice processing circuitry are controlled by not more than one microprocessor; wherein the voice processing circuitry further comprises a

signal processing circuitry coupled to the one microprocessor; and ~~The system as recited in claim 2, further comprising~~

circuitry operable for recording all or a portion of the call during an off-hook state after the telecommunications device is connected to the call.

19. (previously presented) The system as recited in claim 18, wherein the recording circuitry operates in response to a user manually pressing a button on a telephone set.

20. (currently amended) A telephone call and voice processing system comprising:

switching circuitry for receiving a call, wherein the switching circuitry connects the call to one of a plurality of telecommunications devices coupled to the system in accordance with information accompanying the call that identifies the telecommunications device;

voice processing circuitry for automatically interacting with the call, wherein the switching circuitry and the voice processing circuitry are controlled by not more than one microprocessor; and

circuitry operable for recording all or a portion of the call during an off-hook state after the telecommunications device is connected to the call, wherein the recording circuitry operates in response to a user manually pressing a button on a telephone set, and wherein the recording circuitry further comprises:

circuitry for coupling a recording buffer in signal processing circuitry to the call, wherein the signal processing circuitry is coupled to the one microprocessor ~~processor~~.

21. (cancelled)

22. (cancelled)

23. (cancelled)

24. (original) The system as recited in claim 1, further comprising:

circuitry for listening to a voice signal at a telephone extension coupled to the system;

circuitry for activating a recording sequence to record the voice signal; and

circuitry for storing the recorded voice signal in a digital memory.

25. (original) The system as recited in claim 24, wherein the activating circuitry is tactilely initiated by a user of the telephone extension.

26. (original) The system as recited in claim 25, wherein the voice signal originated from the call.

27. (previously presented) A telephone call and voice processing system comprising:

switching circuitry for receiving a call, wherein the switching circuitry connects the call to a telecommunications device coupled to the system, wherein two or more of the plurality of telecommunications devices each further comprises both a speaker and a microphone for enabling a user to audibly communicate with the call;

voice processing circuitry for automatically interacting with the call, wherein the switching circuitry and the voice processing circuitry are controlled by a single processing means;

circuitry for listening to a voice signal at a telephone extension coupled to the system;

circuitry for activating a recording sequence to record the voice signal; and

circuitry for storing the recorded voice signal in a digital memory, wherein the activating circuitry is tactically initiated by a user of the telephone extension, wherein the voice signal originated from a voice mail message stored in the system.

28. (cancelled)

29. (cancelled)

30. (cancelled)

31. (cancelled)

32. (cancelled)

33. (cancelled)

34. (cancelled)

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50. (cancelled)

51. (cancelled)

52. (cancelled)

53. (cancelled)

54. (cancelled)

55. (cancelled)

56. (cancelled)

57. (cancelled)

58. (currently amended) In a telephone call and voice processing system comprising switching circuitry for receiving an incoming call from a source external to the system, wherein the switching circuitry connects the incoming call to a telecommunications device coupled to the system from among a plurality of telecommunications devices connected as telephone extensions of the switching circuitry ~~to the system~~, and voice processing circuitry for automatically interacting with the call, wherein the switching circuitry and the voice processing circuitry are controlled by a single processing means, a method comprising the steps of:

listening to a voice signal at a telephone extension coupled to the system;

activating a recording sequence to record the voice signal; and

storing the recorded voice signal in a memory.

59. (original) The method as recited in claim 58, wherein the activating step is tactilely initiated by a user of the telephone extension.

60. (original) The method as recited in claim 58, wherein the voice signal originated from the call to the system.

61. (original) The method as recited in claim 58, wherein the voice signal originated from a voice mail message stored in the system.

62. (cancelled)

63. (cancelled)

64. (cancelled)

65. (cancelled)

66. (cancelled)

67. (cancelled)

68. (cancelled)

69. (currently amended) A telephone call and voice processing system comprising:

switching circuitry for receiving an incoming call from a source external to the system, wherein the switching circuitry connects the incoming call to one of a plurality of telecommunications devices coupled to the system as extensions to the system; and

voice processing circuitry for automatically interacting with the call to direct the call to a voice mailbox if the extension does not go off-hook to answer the call, wherein the switching circuitry and the voice processing circuitry are controlled by a single microprocessor.

70. (currently amended) A telephone call and voice processing system comprising:

switching circuitry for receiving a call, wherein the switching circuitry connects the call to one of a plurality of telecommunications devices coupled to the system; and

voice processing circuitry for automatically interacting with the call to direct the call to a voice mailbox if the extension does not go off-hook to answer the call, wherein the switching circuitry further comprises a digital cross-point matrix.

71. (currently amended) A telephone call and voice processing system comprising:

switching circuitry for receiving a call, wherein the switching circuitry connects the call to one of a plurality of telecommunications devices coupled to the system;

the plurality of telecommunications devices connected to the system as telephone extensions accessible by the system solely through the switching circuitry;

voice processing circuitry for automatically interacting with the call, wherein the switching circuitry and the voice processing circuitry are controlled by a single processing means;

circuitry for listening to a voice signal at one of the telephone extensions coupled to the system;

circuitry for activating a recording sequence to record the voice signal; and

circuitry for storing the recorded voice signal in a digital memory.

72. (currently amended) A telephone call and voice processing system comprising:

switching circuitry for receiving a call, wherein the switching circuitry connects the call to a telecommunications device coupled to the system;

voice processing circuitry for automatically interacting with the call to direct the call to a voice mailbox if the device does not go off-hook to answer the call, wherein the switching circuitry and the voice processing circuitry are controlled by a single processing means; and

circuitry for permitting a user of a telephone coupled to the system to monitor a voice mail message while the message is being recorded into the user's mailbox.

73. (previously presented) The system as recited in claim 1, wherein the information is detected DTMF tones.

74. (previously presented) The system as recited in claim 1, wherein the call is received by the switching circuitry from a central office trunk line.

75. (previously presented) The system as recited in claim 6, wherein the call is received from a source external to the system, and is connected to one of the telecommunications devices in accordance with detected DTMF tones accompanying the call, wherein the DTMF tones identify the telecommunications device to which the call is directed.

76. (previously presented) A telephone call and voice processing system comprising:

switching circuitry for receiving a call, wherein the switching circuitry connects the call to a telecommunications device coupled to the system; and

voice processing circuitry for automatically interacting with the call, wherein the switching circuitry and the voice processing circuitry are controlled by a single processing means, wherein the voice processing circuitry further comprises a signal processing circuitry coupled to the single processing means, wherein the signal processing circuitry further includes:

a DTMF receiver operable for recognizing DTMF tones from the call and instructing the switching circuitry to connect the call to the telecommunications

device identified by the DTMF tones, wherein the telecommunications device is one of a plurality of telephone extensions connected to the switching circuitry.

77. (previously presented) A telephone call and voice processing system comprising:

switching circuitry for receiving a call, wherein the switching circuitry connects the call to a telecommunications device coupled to the system;

voice processing circuitry for automatically interacting with the call, wherein the switching circuitry and the voice processing circuitry are controlled by a single processing means;

circuitry for listening to a voice signal at a telephone extension coupled to the system;

circuitry for activating a recording sequence to record the voice signal; and

circuitry for storing the recorded voice signal in a digital memory, wherein the activating circuitry is tactically initiated by a user of the telephone extension, wherein the voice signal originated from a voice mail message stored in the system, wherein the call is an incoming call received by the switching circuitry via a central office trunk line, and wherein the switching circuitry connects the incoming call to one of a plurality of telecommunications devices coupled to the system as telephone extensions to the system.

78. (previously presented) The method as recited in claim 58, wherein the external source is a central office trunk line.

79. (previously presented) The method as recited in claim 58, wherein the switching circuitry connects the incoming call to one of the plurality of telecommunications devices in response to information accompanying the incoming call that identifies the telecommunications device to which the incoming call is connected to.

80. (previously presented) The system as recited in claim 69, wherein the external source is a central office trunk line.

81. (previously presented) The system as recited in claim 69, wherein the switching circuitry connects the incoming call to one of the plurality of extensions in response to information accompanying the incoming call that identifies the one of the plurality of extensions.

82. (previously presented) The system as recited in claim 81, wherein the information is detected DTMF tones.

83. (previously presented) A telephone call and voice processing system comprising:

a single microprocessor;

switching circuitry controlled by the single microprocessor;

a trunk line connected to the switching circuitry and adaptable for connecting to central office trunk circuitry;

a plurality of telephone extensions;

extension lines coupling the plurality of telephone extensions to the switching circuitry, wherein a call received by the switching circuitry over the trunk line is connected to one of the plurality of telephone extensions by the switching circuitry in response to information accompanying the call which identifies the one of the plurality of telephone extensions the call desires to be connected to; and

voice processing circuitry for automatically interacting with the call such as for coupling the call to a voice mail box associated with the one of the telephone extensions.

84. (currently amended) ~~The system as recited in claim~~ 1 A telephone call and voice processing system comprising:

switching circuitry for receiving a call, wherein the switching circuitry connects the call to one of a plurality of telecommunications devices coupled to the system in accordance with information accompanying the call that identifies the telecommunications device, wherein two or more of the plurality of

telecommunications devices each further comprises both a speaker and a microphone for enabling a user to audibly communicate with the call; and

voice processing circuitry for automatically interacting with the call, wherein the switching circuitry and the voice processing circuitry are controlled by not more than one microprocessor, wherein each of the two or more of the plurality of telecommunications devices are separately operable telephone extensions.

85. (new) A telephone call and voice processing system comprising:

a microprocessor;

switching circuitry coupled by a data bus to the microprocessor;

a digital signal processor coupled by the data bus to the microprocessor;

a first communications path coupling the switching circuitry to circuitry for interfacing with a plurality of telephone extensions;

a second communications path coupling the switching circuitry to circuitry for interfacing with a central office trunk line; and

a third communications path separate from the data bus, the third communications path coupling the switching circuitry to the digital signal processor.

86. (new) The system as recited in claim 85, wherein the switching circuitry and the digital signal processor are controlled by the microprocessor via instructions sent over the data bus.

87. (new) The system as recited in claim 86, wherein the microprocessor is a single microprocessor controlling both the switching circuitry and the digital signal processor.

88. (new) The system as recited in claim 85 wherein the switching circuitry connects an incoming call, received on the central office trunk line over the second communications path, to the digital signal processor over the third communications

path.

89. (new) The system as recited in claim 88, wherein the switching circuitry connects the incoming call, received on the central office trunk line over the second communications path, to the circuitry for interfacing with the plurality of telephone extensions over the first communications path.

90. (new) The system as recited in claim 89, wherein the microprocessor is a single microprocessor controlling both the switching circuitry and the digital signal processor.

91. (new) A telephone call and voice processing system comprising:

switching circuitry for receiving an incoming call from a source external to the telephone call and voice processing system, wherein the switching circuitry connects the incoming call to one of a plurality of telecommunications devices coupled to the telephone call and voice processing system as extensions to the telephone call and voice processing system; and

voice processing circuitry for automatically interacting with the call to direct the call to a voice mailbox if a user of the telecommunications device does not answer the call, wherein the switching circuitry and the voice processing circuitry are controlled by a single microprocessor.

92. (new) The system as recited in claim 3, wherein the voice processing circuitry automatically interacts with the call to direct the call to a voice mailbox if a user of the telecommunications device does not answer the call.